

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF OREGON

NATIONAL WILDLIFE FEDERATION, IDAHO
WILDLIFE FEDERATION, WASHINGTON
WILDLIFE FEDERATION, SIERRA CLUB,
TROUT UNLIMITED, PACIFIC COAST
FEDERATION OF FISHERMEN'S
ASSOCIATIONS, INSTITUTE FOR
FISHERIES RESOURCES, IDAHO RIVERS
UNITED, IDAHO STEELHEAD AND SALMON
UNITED, NORTHWEST SPORTFISHING
INDUSTRY ASSOCIATION, SALMON FOR ALL,
COLUMBIA RIVERKEEPER, AMERICAN RIVERS,
INC., FEDERATION OF FLY FISHERS, and NW
ENERGY COALITION,

CV 01-640-RE

OPINION AND ORDER

Plaintiffs,

and

STATE OF OREGON,

Intervenor-Plaintiff,

vs.

NATIONAL MARINE FISHERIES SERVICE,
U.S. ARMY CORPS OF ENGINEERS, and
U.S. BUREAU OF RECLAMATION,

Defendants,

and

STATE OF IDAHO, NORTHWEST IRRIGATION UTILITIES, PUBLIC POWER COUNCIL, WASHINGTON STATE FARM BUREAU FEDERATION, FRANKLIN COUNTY FARM BUREAU FEDERATION, GRANT COUNTY FARM BUREAU FEDERATION, NORTHWEST REQUIREMENT UTILITIES, PACIFIC NORTHWEST GENERATING COOPERATIVES, INDUSTRIAL CUSTOMERS OF NORTHWEST UTILITIES, ALCOA, INC., and INTERNATIONAL ASSOCIATION OF MACHINISTS & AEROSPACE WORKERS, CLARKSTON GOLF & COUNTRY CLUB, STATE OF MONTANA, KOOTENAI TRIBE OF IDAHO, and INLAND PORTS AND NAVIGATION GROUP,

Intervenor-Defendants.

REDDEN, Judge:

The matter before the court is plaintiffs' (collectively "NWF") motion for further injunctive relief (doc. 1105). Oral argument was held on December 15, 2005. For the following reasons, the court **GRANTS in part and DENIES in part** NWF's motion.

The background of this case is set out in the court's opinions on the parties' cross-motions for summary judgment issued on May 26, 2005, and NWF's motion for preliminary injunction or in the alternative, for permanent injunction, issued on June 10, 2005. It need not be repeated here. This is the third time in 18 months that NWF, supported by the Treaty Tribes, has sought injunctive relief requiring the Army Corps of Engineers (Corps) to modify proposed Columbia and Snake River dam operations by increasing spill in the summer. NWF now also seeks injunctive relief requiring the Corps to increase spill to assist juvenile spring/summer chinook salmon and steelhead

migrating to the ocean during the spring. NWF also seeks an order requiring the Corps to increase the amount of water in the river for a proposed augmentation of flow, thereby creating a more natural river hydrograph for migrating juveniles and decreasing their travel time to the ocean.

STANDARDS FOR ESA INJUNCTIVE RELIEF

The traditional preliminary injunction analysis does not apply to injunctions issued pursuant to the Endangered Species Act (ESA). "In cases involving the ESA, Congress removed from the courts their traditional equitable discretion in injunction proceedings of balancing the parties' competing interests." Friends of the Earth v. United States Navy, 841 F.2d 927, 933 (9th Cir.1988). "Congress has spoken in the plainest of words, making it abundantly clear that the balance has been struck in favor of affording endangered species the highest of priorities." TVA v. Hill, 437 U.S. 153, 194 (1978). Accordingly, courts "may not use equity's scales to strike a different balance." Sierra Club v. Marsh, 816 F.2d 1376, 1383 (9th Cir.1987). "Congress has determined that under the ESA the balance of hardships always tips sharply in favor of endangered or threatened species." Marbled Murrelet v. Babbitt, 83 F.3d 1068, 1073 (9th Cir.1996).

To establish an entitlement to a preliminary injunction, "the plaintiff must make a showing that a violation of the ESA is at least likely in the future." Amoco Production Co. v. Village of Gambell, 480 U.S. 531, 545 (1987). An ESA violation, however, does not always lead to the automatic issuance of an injunction. Biodiversity Legal Foundation v. Badgley, 284 F.3d 1046, 1056 (9th Cir.2002). When any federal statute is violated, the test is "whether an injunction is necessary to effectuate the congressional purpose behind the statute." Id. at 1057. "Accordingly, injunctive relief

under the ESA is generally mandated where the moving party 1) has had or can likely show 'success on the merits,' and 2) makes the requisite showing of 'irreparable injury.'" Greenpeace v. National Marine Fisheries Service, 106 F.Supp.2d 1066, 1072 (W.D. Wash. 2000). "Given a substantial procedural violation of the ESA in connection with a federal project, the remedy must be an injunction of the project pending compliance with the ESA." Thomas v. Peterson, 753 F.2d 754, 764 (9th Cir.1985). Nevertheless, any injunctive relief should be narrowly tailored to remedy the specific ESA violation. National Wildlife Federation v. National Marine Fisheries Service, 422 F.3d 782, 799-800 (9th Cir. 2005).

INJUNCTIVE RELIEF

In May 2005, I found NOAA's 2004BiOp violated the ESA and its implementing regulations. I found proposed dam operations would jeopardize listed salmon species. I held the 2004BiOp was procedurally and substantively flawed.

NWF seeks injunctive relief modifying the Corps' proposed dam operations in 2006 in order to mitigate jeopardy. NWF requests an order increasing spring and summer spill and decreasing the Corps' reliance on transportation in order to provide migrating salmon a safer passage past the dams. In addition, NWF requests that the Corps and other federal defendants take specific actions to augment river flow in order to establish a more natural river hydrograph. NWF asserts the implementation of its spill and augmented flow proposals will reduce the risk of harm to listed salmon species that would occur with the federal defendants' proposed dam operations. NWF argues

the best available science supports these proposals.

Federal defendants assert the Corps has updated its 2004BiOp proposal for dam operations based upon new research and information. The Corps proposes a mix of transportation and spill based on recent studies addressing the effectiveness of these two methods of dam passage, emphasizing transportation during the latter part of the spring migration period and the last two weeks of the summer migration period. The Corps does not propose to augment flow. Federal defendants argue the Corps' proposal reflects the best available science.

As to spill, the parties' dispute essentially involves the extent to which the Corps intends to rely on transportation, rather than spill, during the spring and summer seasons. To a lesser extent, the parties disagree on the amount of spill needed. The parties' dispute as to the augmented flow issue is more fundamental.

A. Spill.

The spring migration period generally runs from April 3 through June 20 on the Snake River and April 10 through June 30 on the Columbia River. Snake River juvenile spring/summer chinook and steelhead are the primary beneficiaries of spring spill and transportation.

The summer migration period generally runs from June 21 through August 31 on the Snake River and July 1 through August 31 on the Columbia River. Snake River juvenile fall chinook are the primary beneficiaries of summer spill and transportation.

There is no doubt that the existence of each of the dams has severely impacted

the ability of these species to survive. In 1992, the Corps developed spill and transportation operations by barge or truck to facilitate juvenile salmon migration. This increased the chance of survival past the dams to the ocean and the subsequent return of adults to propagate the species. Studies do not establish, with absolute certainty, the relative benefits of spill versus transportation. Therefore, the Corps says it has adopted a "spread-the-risk" philosophy, using spill and transportation in relatively equal measure.

1. The Corps' Proposed 2006 Spring Spill Program.

Federal defendants have divided the spring season on the Snake River into two segments, early spring (from April 3 through April 19) and late spring (from April 20 through May 30) on the Snake River. Federal defendants use a single spring season of April 10 through June 30 on the Columbia River.

Early Spring: The Corps proposes operations at the four Snake River dams (Lower Granite, Little Goose, Lower Monumental, and Ice Harbor) and the four lower Columbia River dams (McNary, John Day, The Dalles, and Bonneville) that achieve a balance of approximately 48% passage by spill and 52% passage by transportation. NWF proposes relatively small increases in nighttime spill volume at Little Goose and Bonneville, a 30% increase in spill at McNary, and the addition of daytime spill at John Day.

The differences in the suggested spill volumes proposed for the Snake River dams are not substantial. A significant difference exists between the parties' proposals at the McNary and John Day dams on the Columbia River. At McNary dam, the Corps

wants this second year to study the effects of spilling 40% of the flow, 24 hours a day, in the early spring and no spill during the day and 150 kcfs at night in the late spring. NWF requests a 55% spill, 24 hours a day, for the entire spring. At John Day, the Corps proposes no spill during the day and 60% spill at night compared to NWF's proposal for 45% spill for 24 hours a day.

The Corps reasons that a second year of spill data at McNary dam at the levels proposed by the Corps will be helpful in deciding on future spill levels. That approach is reasonable. At John Day dam, research suggests spring/summer chinook fare better but steelhead fare worse with the 24 hour spill proposed by NWF.

I conclude the Corps' proposal for early spring spill at each of the dams effectuates a reasonably balanced spread-the-risk approach consistent with past operations. It is based on the best available science. Accordingly, I defer to the Corps' scientific rationale for its early spring spill proposals at each of the Columbia and Snake River dams. See Marsh v. Oregon Natural Res. Council, 490 U.S. 360, 378 (1989) (an agency must have discretion to rely on the reasonable opinions of its own qualified experts even if, as an original matter, a court might find contrary views more persuasive). Accordingly, I deny NWF's motion for injunctive relief regarding early spring spill.

Late Spring: The Corps proposes a radical departure from past operations by eliminating all spill and relying exclusively on collection and transportation of juveniles at Lower Granite and Lower Monumental dams from April 20 through May 30, and at Little Goose dam from May 26 through May 30. These are collector dams where fish are

diverted into barges or trucks for transportation. Federal defendants say this departure from the long-standing spread-the-risk philosophy is based upon "adaptive management," considering "new information." Federal defendants rely on John Williams, NOAA's Supervisory Fisheries Research Biologist. He relies on a new study of returning adults at Lower Granite dam that were transported in the late spring and that returned to the river to spawn as adults. His conclusion was that the late spring/summer smolt-to-adult return (SAR) ratio of transported smolts is greater than the SAR ratio for smolts that migrated in-river. He also concluded that the smolts that migrate in-river in the early spring return to spawn in larger numbers than those that were transported.

NWF challenges the Williams study, claiming it is flawed. Their expert, Frederick Olney, and the Treaty Tribes' expert, Thomas Lorz, point out that: (1) the Williams' study relied on a limited sampling of fish which passed only through the bypass system at Lower Granite dam. It did not include smolts that passed in-river over the spillways or through the turbines; (2) it incorporated the data from only four of the nine years for which such data were available; and (3) the data reflected in-river SARs for wild spring/summer chinook exceeded transportation SARs in three of the four years Williams analyzed.

NWF's experts rely on a comparative survival study (CSS) workshop in 2004 that studied all migrants that survived Lower Granite dam. That is, the study was not limited to those smolts that passed through the bypass facility. NWF's study does not find the

federal defendants' SAR ratios, which is urged to eliminate spill during the late spring.

The differences reflect the continuing uncertainty regarding the relative benefits of transportation and spill in facilitating safer migration of smolts. Federal defendants' "spread-the-risk" philosophy was originally formulated as a response to that uncertainty, and I find their radical departure from that philosophy, for the late spring of 2006, is not justified in light of the best available science. I do not defer to the federal defendants' scientific rationale in this instance.

I grant NWF's motion for injunctive relief regarding late spring spill and order the Corps to spill at Lower Granite and Lower Monumental dams from April 20 through May 30, and at Little Goose dam from May 26 through May 30, at the same rate that the Corps proposes for the rest of the spring period.

2. The Corps' Proposed Summer Spill Program.

The Corps proposes a balanced spread-the-risk operation involving approximately 50% spill and 50% transportation for the summer migration period until August 15. After August 15, if 95% of the juvenile salmon and steelhead have passed the four Snake River dams and McNary dam, the Corps will consider eliminating spill at those dams.

NWF's proposal reflects their view that "spill is generally well-accepted as the safest route of passage for juvenile salmon and steelhead migrating down the Snake and Columbia rivers." NWF does agree that a "spread-the-risk" philosophy has considerable scientific support and is likely to reduce the harm to and increase the survival of ESA-listed salmon and steelhead. Even so, NWF urges more spills and

somewhat less transportation, which they believe will increase survival of the listed salmon and steelhead. NWF points to the Fish Passage Center's conclusion following its preliminary evaluation of the 2005 summer spill operations. It concluded that the survival rate for migrating sub-yearling Snake River fall chinook was the highest recorded in five years from Lower Granite dam to McNary dam. I agree that the 2005 summer spill benefitted the migrating juvenile Snake River fall chinook. I also agree that the Corps' "spread-the-risk" plan for the summer of 2006 will benefit the migrating juvenile Snake River fall chinook.

The parties' summer spill proposals through August 15 differ most significantly at Lower Monumental dam on the Snake River. The Corps proposes to spill 17 kcfs, 24 hours a day, compared to NWF's proposal to spill 35 kcfs, 24 hours a day. Last year, I ordered the Corps to spill at a level of approximately 21 kcfs. Contrary to NWF's proposal, the Treaty Tribes' expert, Thomas Lorz, recommends the same 21 kcfs level again. He notes the total dissolved gas levels in the water reach are undesirable levels for migrating salmon above 21 kcfs.

On this record, I find the Corps' proposed spill at Lower Monumental dam is reasonable. In addition, NWF has not demonstrated that the relatively modest differences between the proposals at the other dams will significantly alter the Corps' proposed 50/50 ratio between in-river migration and transportation. Accordingly, I find no reason to modify the Corps' proposals for summer spill levels at any of the dams

from June 21 through August 15. I deny NWF's request for an injunction as to the

levels of summer spill.

The remaining summer spill issue relates to the Corps' proposal to cease spill in favor of transportation on August 15th through August 31st if 95% of the run has passed the dam. Presumably, if less than 95% of the run has passed, spill will continue until August 31st. As to this issue, NWF's motion to continue the spill until August 31st is granted. The concept forwarded by the Corps should be examined on remand, with an examination of the issue of transportation by truck.

3. Conclusion.

Federal defendants have set forth in detail the amounts and timing of spring and summer spill at the Columbia and Snake River dams. I approve the spills, except that (a) in the late spring, the Corps shall continue to spill in the same manner as in the early spring; and (b) in the summer, the Corps shall continue to spill through August 31st.

4. Implementation Reports.

Beginning with the first day of the spring and summer spills, and every 30 days thereafter, federal defendants shall provide the court with a written report describing the implementation and progress of the spill program.

B. Flow Augmentation.

NWF seeks to augment river flow to mimic a more natural river, contending that salmon would benefit far more than they have with a tinkering of dam operations. Federal defendants, and intervenor-defendants including the Regional Coalition, Farm Bureaus, and Idaho, oppose NWF's motion for injunctive relief

NWF and the Treaty Tribes would have the court order the federal defendants to

obtain the necessary water to supply the augmented flow. They claim that the federal agencies could accomplish one or more of the following with the court's order:

(1) Reach agreement with Canada under the Columbia River Treaty to insure that Canadian reservoirs at Duncan, Arrow, and Mica are maintained at their Upper Rule Curves, which are the highest reservoir elevations that provide adequate space to capture spring run-off to avoid flooding, and/or

(2) Obtain an agreement between BPA and BC Hydro for the "one-time use of non-treaty storage" water totaling 4.5 million acre feet that is potentially available at Mica Reservoir in Canada, or otherwise draw down a similar amount of water in the summer from storage held in Lake Roosevelt or Banks Lake reservoirs, and/or

(3) Limit U.S. reservoir draw-downs for power generation to their Upper Rule Curve elevations.

NWF asserts that salmon would benefit because an augmented flow would increase the average speed of the water, decreasing travel time to the ocean for juvenile salmon. Fish would get to the saltwater quicker, would be less stressed, and would be less likely victims of predators. Faster water creates turbidity which helps to conceal salmon, and NWF believes the faster water velocity would reduce the temperature rise of water in the reservoirs. NWF points to increased sediment mobilization throughout the river, which, they say, would replenish salmon "food webs." Finally, NWF urges that augmented flows would increase the quality and quantity of river, estuary, and near-shore marine habitats. The Treaty Tribes support NWF and

include additional rationale for such an approach.

Federal defendants oppose NWF's proposal, claiming that it (a) is not feasible; (b) would cause harm to Kootenai, Spokane and Colville tribal cultural resources and burial sites; (c) would harm other listed species, water quality, and economic interests as a result of decreased power generation; and (d) is not based on the best available science.

1. Feasibility.

In NOAA's 2000BiOp, it relied on a history of flow augmentation dating back to 1992-1993. NOAA concluded that the following flow augmentation measures were "feasible and implementable" as a reasonable and prudent alternative measure to avoid jeopardy to listed species and would "provide direct and indirect survival benefits to salmon":

- Meet flow objectives at Lower Granite, Priest Rapids, McNary, and Bonneville dams.
- Provide in-season management for operational flexibility and best use of available water volumes.
- Provide guidance on reservoir elevations in early spring, early summer, and at the end of the summer flow augmentation season.
- Coordinate with water releases from Canada, the upper Snake River, and the Hells Canyon Complex.
- Take specific actions to improve water management for salmon:
1) additional drafts of selected FCRPS reservoirs, 2) additional water from other sources, 3) shifts of flood control among projects, 4) implementation of VARQ flood control operations at Libby and Hungry Horse reservoirs, 5) review of system flood control objectives, and 6) continued research on summer-migrating SR fall chinook salmon losses.

2000BiOp, ¶ 9.6.1.1.

Federal defendants now oppose NWF's flow augmentation request, backing off from their recommendations in the 2000BiOp. They now claim that further consultation with the action agencies leads them to believe the operations are not feasible.

(a) Agreements with Canada.

Federal defendants argue I lack the authority to dictate treaty obligations between the United States and Canada regarding the maintenance of Upper Rule Curve levels at Canadian reservoirs. I agree. Federal defendants point out that the availability of additional water at Mica Reservoir is subject to agreements between BPA and B.C. Hydro. Those agreements have expired. I do not have the authority to compel an agreement between those entities. I agree with federal defendants that the proposed solution to the available water supply is not feasible by way of an injunction.

(b) Maintenance of Upper Rule Curve Levels.

NWF says that more water would be available in the spring if the Corps maintained reservoir water levels at the Upper Rule Curve. The Corps points to risks of flooding and asserts that specific reservoir water levels cannot be maintained. The Corps recites a variety of events beyond its control that could lead to disaster.

I will not second-guess the Corps and order it to maintain U.S. reservoir levels at Upper Rule Curve levels. The Corps has tried and failed to maintain such water levels as a result of events beyond its control. I defer to the expertise of the Corps.

2. Harm to Other Interests.

Without additional water, NWF would draw down Lake Roosevelt and Banks Lake to provide an alternative supply for summer flow augmentation. This proposal is opposed by:

(a) Federal defendants, arguing that such draw-downs would severely harm recreation, increase vandalism of Kootenai, Spokane and Colville tribal cultural resources and burial sites, and destabilize the power supply system, and

(b) the Regional Coalition, comprised of the Kootenai Tribe, Spokane Tribe, Colville Tribe, State of Washington, State of Montana, and Bonneville Power Administration Customers, claiming harm to tribal resources, probable violations of Washington's water quality standards, exposure of contaminated sediments at Lake Roosevelt, adverse impacts to habitats of other listed resident and anadromous species (bull trout, sturgeon, and chum salmon), and increased power rates.

3. Best Available Science.

NWF believes that restoration of the Columbia and Snake rivers to a more natural hydrograph will necessarily benefit salmon. In November 2002, the Independent Scientific Advisory Board (ISAB)¹ was assigned the task of updating and clarifying its views on the benefits to salmon of flow augmentation. In its report issued on February 10, 2003, entitled Review of Flow Augmentation: Update and Clarification, ISAB noted as a preliminary matter that "many questions remain" regarding the "relationship between river flows and salmon production." In summarizing the present science on

¹ ISAB provides independent scientific expertise and advice to the Northwest Power Planning Council, NMFS, and the Columbia River Basin Tribes, with regard to their fish and wildlife programs.

the issue, ISAB noted that "the benefit to salmon of . . . incremental adjustments [to flow] has not been well quantified." Id. at p. 2. ISAB then stated:

A different perspective emerged from this latest review. We realize that the prevailing rationale for flow augmentation is inadequate. It is neither complete nor comprehensive. There is room for alternative explanations of data that have scientific justification and practical value for managing the hydrosystem for multiple uses including salmon recovery.

The prevailing flow-augmentation paradigm, which asserts that in-river smolt survival will be proportionally enhanced by any amount of added water, is no longer supportable. It does not agree with information now available.

Id. at pp. 2-3.

NWF has failed to establish that the best available science supports its proposal for augmented flow during the summer 2006 migration period. This, coupled with the potential harm to other listed species, militates against granting the extraordinary relief NWF requests by injunction proceeding.

4. Conclusion.

I deny NWF's request for an injunction to augment flow during the summer of 2006.

C. Remand Issues.

1. Fish Passage Center.

The most recent information on the benefits of summer spill came from the Fish Passage Center's count of fish that survived the 2005 summer migration, which involved court-ordered spill. The Fish Passage Center's count showed that more spill improved the survival rate of salmon passing the dams compared to previous years. The Fish Passage Center's expertise at gathering such useful data must be replicated for the

spring of 2006 and beyond. Only with such data can the relative benefits of spill and/or transportation be determined. The situation demands more certainty. I have expressed my concern over the demise of the Fish Passage Center. I have been assured that the BPA is seeking a new group of scientists to perform that same function. The group must have the expertise and reliability that the Fish Passage Center has provided for so many years.

2. Transportation by Barge or Truck.

In the 2000BiOp, NOAA concluded that the Corps should avoid jeopardy to fall chinook during migration by the "[i]ncreased use of barges and less reliance on trucks to transport summer migrants." 2000BiOp, ¶ 9.1.2. Neither NOAA nor the Corps has indicated there has been any change in the preference for barge over truck transportation. The decision to use trucks late in the summer migration period is based solely on economic considerations. I have seen no evidence of any benefit to the salmon by the use of trucks rather than barges. During the remand period, I expect federal defendants to justify transportation by trucks, or to eliminate them.

3. Feasibility of River Management.

The Corps now asserts it is not feasible to obtain additional water for flow purposes by tapping Canadian sources, by drawing down U.S. reservoirs, or by maintaining Upper Rule Curve levels. However, these management techniques were included in the RPA for the 2000BiOp and were found to be feasible. We must, in the remand of the 2004BiOp, consider these and other river management techniques.

4. ISAB Review.

The Regional Coalition has highlighted the uncertainty of the benefits of spill or transportation regarding the summer migration. The Coalition recommends that the Corps submit a proposed study plan for summer spill for review by ISAB. If able and willing, ISAB could make recommendations and suggestions to the remand collaborates.

We should consider asking ISAB to participate in the summer spill plan as well as the flow issue. ISAB would not be determinative on issues, just helpful.

5. New Biological Opinion.

When I remanded the 2000BiOp, I was certain, and I was assured, that the flaws therein would be corrected. The 2004BiOp was the disappointing result.

I have been heartened by the statements of the parties during the past several weeks. They have been collaborating and they agree to continue to do that.

The federal defendants have promised a thorough review of the four "H's" and have pledged that all of the issues briefed and argued on December 15th will be on the table.

We need a viable biological opinion. The public demands and deserves no less.

CONCLUSION

For these reasons, the court **grants** and **denies** plaintiffs' motion for further injunctive relief (doc. 1105), as more particularly set forth herein.

IT IS SO ORDERED.

DATED this 29th day of December, 2005.

/S/ James A. Redden
James A. Redden
Senior United States District Judge